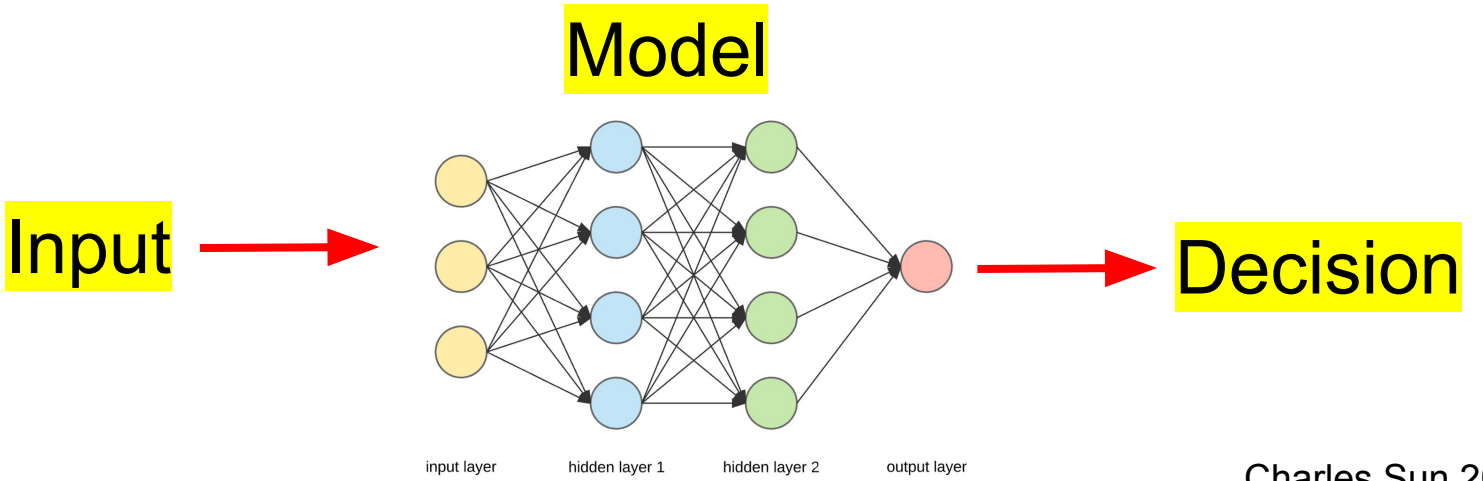
Class 4: Machine Learning

A field of computer science that explores how machines can learn on their own to perform certain tasks such as classification of data. Increasingly Machine Learning is used in robotics for human-machine interaction.

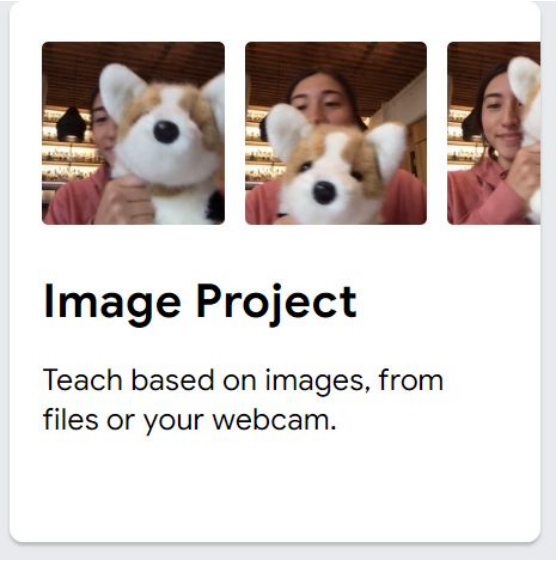


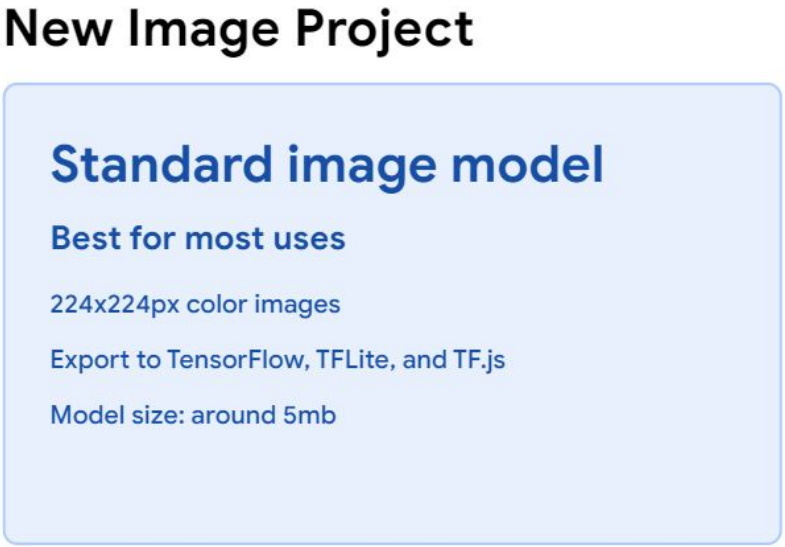
Charles Sun 2022

Hands-On: Computer Science: Machine Learning

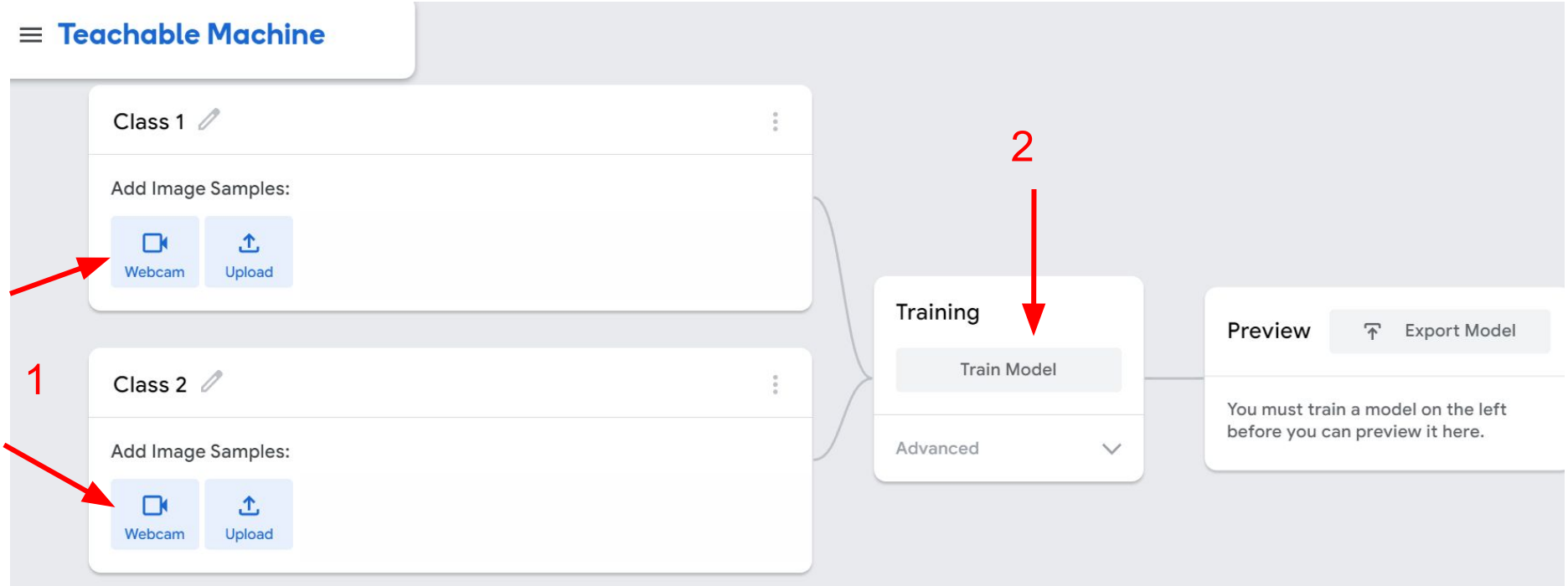
Build an image learning model at Teachable Machine

https://teachablemachine.withgoogle.com/train

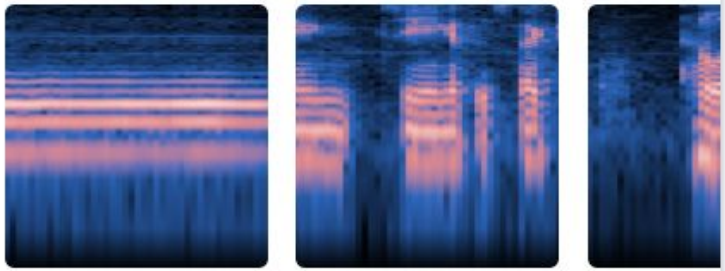




1, Use the **Webcam** on your laptop to capture a series of images for each object you wish the model to identify…
2. Click on Train Model



To explore further, try different models: audio, pose, etc.



Audio Project

Teach based on one-second-long sounds, from files or your microphone.

Pose Project

Teach based on images, from files or your webcam.

Question: How does Machine Learning work?

A good starting point…
https://www.youtube.com/watch?v=ukzFI9rgwfU

Note: Watch this at home. Youtube.com is blocked at school.